

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Patrick H. Le Roux

Serial No.:

10/707,292

Filed:

December 3, 2003

For:

NMR EXCITATION METHOD

Attorney Docket No: 126475 (GEMS 0186 PA)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail with sufficient postage in an envelope addressed to: Mail Stop DD, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on:

December 8, 2003

Date of Deposit

Jo Anne Croskey

Signature

DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.56

Mail Stop DD Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In compliance with 37 C.F.R. § 1.56, the art listed and identified on the attached PTO forms 1449A and 1449B is being submitted herewith for consideration by the Examiner. A copy of each of the listed references is included herewith.

It is Applicant's opinion that the claims presently on file patentably distinguish the present invention from each of these references. The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would

126475 (GEMS 0186 PA) ·

U.S.S.N. 10/707,292

-2-

render the same obvious, either singly or in combination, to a person of ordinary skill in the art.

No fee is believed to be due because this statement and enclosures are being filed before the first Office Action on the merits mailed by the PTO. Commissioner is authorized to charge any additional fees, which may be required, or credit any overpayment, to Deposit Account No. 50-0476.

Respectfully submitted,

ARTZ & ARTZ, P.C.

Registration No. 50,579

28333 Telegraph Road, Suite 250

Southfield, MI 48034

(248) 223-9500

Date: December 8, 2003

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449A/PTO				Complete if Known			
,				Application Number	10/707,292		
ln:	nformati n Disc	closur S	tat ment	Filing Date	December 3, 2003		
	Ву Ар	plicant		Applicant	Patrick H. Le Roux		
(use as many sheets as necessary)				Group Art Unit	To be determined		
				Examiner Name	To be determined		
Sheet	. 1	of	2	Attorney Docket Number	126475 (GEMS 0186 PA)		

U.S. PATENT DOCUMENTS							
Examine r Initials	Cite No.	U.S. PATENT DOCUMENT	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		Kind Code Number (if known					
	AA	3,826,972	Day et al.	July 30, 1974			
	AB	5,212,448	Le Roux et al.	May 18, 1993			
	AC	5,256,967	Foo et al.	Oct. 26, 1993			
			 				
		•					
<u> </u>							
			<u> </u>				
	_						
				<u> </u>			
			<u></u>				

			F	OREIGN P	ATENT DOCUMEN	ITS		
Examine Initials	Cite No.¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Office	³ Number ⁴	Kind Code ⁵ (if known)			- ,,	
	1.	EP	0 316 312 B1					
	2.	wo	88/00699					
		<u> </u>			·			
					-			_

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

unique of the tation designation number. ² See a ttached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

DEC 1 1 2003 &

Substitute for Form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/707,292

Filing Date December 3, 2003

First Named Inventor Patrick H. Le Roux

Group Art Unit To be determined

Examiner Name To be determined

Attorney Docket Number 126475 (GEMS 0186 PA)

(use as many sheets as necessary)

Sheet 2 of

2 of 2 Attorney Docket Number 126475

	OTHER P	RIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
-	1.	R. A. DE GRAAF ET AL: "Adia batic RARE Imaging", NMR IN BIOMEDICINE, pgs. 29-35, XP008023942	
	2.	ALESSIO SERREQI and MELVIN B. COMISAROW: "Frequency Interpolation of Discrete, Apodized, Magnitude Lineshapes", APPLIED SPECTROSCOPY, Vol. 41, No.2, 1987, pgs. 288-95,	
_	3.	B. A. HARGREAVES, ET AL: "Characterization and reduction of the transient response in steady-state MR imaging", Magnetic Resonance in Medicine, Vol. 46, pgs. 149-158	
	4.	J. S. BLICHARSKI: "Approaching The Steady State At Fast Adiabatic Transitions inNuclear Magnetic Resonance", ACTA PHYSICA POLNICA, Vol. 36, pgs. 755-761, XP008023939	
	5.	YI SUN ET AL: Small Vessel Enhancement in MRA Images Using Local Maximum Mean Processing, IEE TANSACTIONS ON IMAGE PROCESSING, Vol. 10, No. 11, Nov. 2001, pgs. 1687-99	
	6.	PATRICK LE ROUX: FISP Stabilization By Adiabatic Ramp Down, 16th June 2002, pgs. 1-8	
	7.	PATRICK LE ROUX: Simplified Model and Stabilzation of SSFP Sequences, 13th August 2002, pgs. 1-19	
	<u> </u>		<u> </u>

	· · · · · · · · · · · · · · · · · · ·		 	
Examiner Signature		Date Considered	· — —··	-

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.